

**From:** [PETERSON Jenn L](#)  
**To:** [Robert Gensemer](#)  
**Cc:** [Burt Shephard/R10/USEPA/US@EPA](#); [Eric Blischke/R10/USEPA/US@EPA](#); [Dana Davoli/R10/USEPA/US@EPA](#)  
**Subject:** FW: [Fwd: Re: JCSC chronic WQC for dioxin is incorrect]  
**Date:** 01/25/2007 02:39 PM

---

I was wondering where the 0.0001 ug/L value was coming from in the LWG in-water table - 0.00001 ug/L makes more sense. From Burt's analysis I guess it is clear where both the 0.000038 and the 0.00001 values came from - I am fine sticking with the .00001 ug/L value. Consistency between the two projects would sure be nice.

-Jennifer

-----  
From: (b) (6) [mailto:(b) (6)]  
Sent: 2007 2:3  
To: PETERSON Jenn L  
Subject: [Fwd: Re: JCSC chronic WQC for dioxin is incorrect]

=====  
From: Robert Gensemer <[rgensemer@parametrix.com](mailto:rgensemer@parametrix.com)>  
Date: 2007/01/25 Thu PM 02:37:22 CST  
To: [Davoli.Dana@epamail.epa.gov](mailto:Davoli.Dana@epamail.epa.gov), Charlie Wisdom <[cwisdom@parametrix.com](mailto:cwisdom@parametrix.com)>  
Cc: [blischke.eric@epa.gov](mailto:blischke.eric@epa.gov), [Shephard.Burt@epamail.epa.gov](mailto:Shephard.Burt@epamail.epa.gov), (b) (6)  
Subject: Re: JCSC chronic WQC for dioxin is incorrect

Dana: As I said in an earlier e-mail to Jennifer, we are currently using the National AWQC of 0.00001 ug/L, which is 3.8x more conservative than this DEQ value. Given that this was EPA's official recommendation to LWG (particularly since they claimed they were also using the National AWQC but were 10x off at 0.0001 ug/L...), I propose we stay with this value for now. Looks like both Arkema and LWG were having decimal placement problems! :) If, however, you would prefer consistency with DEQ value and/or Arkema, lets decide that soon. Won't make a huge difference for our current screening efforts though since we are being more conservative anyway.-  
Bob \*\*\*\*\*

Robert W. Gensemer, Ph.D.  
Parametrix, Inc.  
33972 Texas Street SW  
Albany, OR 97321  
T 541-791-1667, x-6510  
F 541-791-1699  
C 541-760-1511  
[rgensemer@parametrix.com](mailto:rgensemer@parametrix.com)  
\*\*\*\*\*

>>> <[Davoli.Dana@epamail.epa.gov](mailto:Davoli.Dana@epamail.epa.gov)> 1/25/2007 11:49:58 AM >>>  
Burt was looking over the JCSC values and noticed that the value for the chronic WQC in the JCSC table for 2,3,7,8 -TCDD is incorrect. It is supposed to be 0.000038 ug/l not 0.00038 ug/l. Charlie, could you please check that Arkema got it right. Thanks!!! Bob, you may also need to check this in the screening table that we are using for the data review.

Dana Davoli/R10/USEPA /US		To
01/25/2007 11:14 AM	<a href="mailto:rgensemer@parametrix.com">Robert Gensemer &lt;rgensemer@parametrix.com&gt;</a>	
	Chip Humphrey/R10/USEPA/US@EPA, Charlie Wisdom < <a href="mailto:cwisdom@parametrix.com">cwisdom@parametrix.com</a> >, Eric Blischke/R10/USEPA/US@EPA, (b) (6) Burt Shephard/R10/USEPA/US@EPA	cc
	Subject Re: Fw: 10x versus 100x DDX PECs (Document link: Dana Davoli)	

I just spoke with Burt and we were thinking that one way to go for both the bioaccumulation values and the PEC is to not use total DDX but rather just do all of the screening for Arkema and the RI using only DDE, DDD, and DDT.

The values would be, in ug/kg:

	PECs	Bioaccumulation SLV
DDT	62.9	0.062
DDD	28	0.039
DDE	31.3	0.0038

The PECs are the McDonald values from the JCSC for the 4,4' DDXs. The bioaccumulation SLVs are those from "Calculating Sediment Screening Levels for DDT" (Poulsen and Peterson, March 22, 2006) which is attached and was done specifically for the Arkema EE/CA. We would use these for 4, 4' DDD, DDT, and DDE as well as for the sum of the 2, 4' plus 4,4' data. This would eliminate the need to use the 572 ug/kg for total DDX from the MacDonald et al 2000 paper. However, it would also not permit use of the total DDX value from the ODEQ's "Assessing Bioaccumulative Chemicals of Concern in Sediment", which is 0.035 ug/kg.

(See attached file: 20060322 ODEQ SLV DDT DDD DDE.pdf)

Rob  
ert  
Gen  
sem  
er  
<rg  
ens  
eme  
r@p  
ara  
met  
rix  
.co  
m>  
  
01/  
25/  
200  
7  
10:  
37  
AM

Eric Blischke/R10/USEPA/US@EPA, Dana Davoli/R10/USEPA/US@EPA To  
Eric Blischke/R10/USEPA/US@EPA, Chip Humphrey/R10/USEPA/US@EPA, Charlie Wisdom cc  
(b) (6) m>  
Subject  
Re: Fw: 10x versus 100x DDX PECs

Specifically for our analyses currently ongoing, the 572 ug/kg value is being applied only to TOTAL (of 6 isomers) DDTs. We have different values for individual DDXs in the risk parameters table: DDD, DDE, and DDT (not total of 6), and they match what Charlie summarized below. -Bob

\*\*\*\*\*  
Robert W. Gensemer, Ph.D.  
Parametrix, Inc.  
33972 Texas Street SW  
Albany, OR 97321  
T 541-791-1667, x-6510  
F 541-791-1699  
C 541-760-1511  
rgensemer@parametrix.com  
\*\*\*\*\*

>>> <Blischke.Eric@epamail.epa.gov> 1/25/2007 10:06:49 AM >>>  
The 572 ug/kg is a MacDonald, et. al., PEC. See Table 3 of the January 2000 paper. The TEC of 5.28 ug/kg for total DDTs is also taken from this paper - see Table 2.

Eric

Dana  
Davoli/R10/USEPA  
/US  
01/25/2007 09:36  
AM

(b) (6)  
rgensemer@parametrix.com To  
blischke.eric@epa.gov,  
humphrey.chip@epamail.epa.gov cc  
Subject  
Fw: 10x versus 100x DDX PECs

I am concerned about the values of 572 ug/kg PEC for the total. What did we decide yesterday?  
There is no total value in the JSCS table.  
----- Forwarded by Dana Davoli/R10/USEPA/US on 01/25/2007 09:32 AM -----

Charlie Wisdom  
<cwisdom@parametrix.com>  
01/24/2007 08:15  
PM

ANDERSON.Jim@deq.state.or.us,  
cyril.alex@deq.state.or.us,  
gainer.tom@deq.state.or.us,  
mcclincy.matt@deq.state.or.us,  
peterson.jennifer@deq.state.or.us  
, poulsen.mike@deq.state.or.us,  
craig.christian@eiltld.net,  
jennifer.arthur@eiltld.net,  
jean.lee@envintl.com, Sean  
Sheldrake/R10/USEPA/US@EPA, Eric  
Blischke/R10/USEPA/US@EPA, Dana  
Davoli/R10/USEPA/US@EPA, Rene  
Fuentes/R10/USEPA/US@EPA, Joe  
Goulet/R10/USEPA/US@EPA,  
greppo-grove.gina@epa.gov, Chip  
Humphrey/R10/USEPA/US@EPA,  
Jim.Wright@noaa.gov,  
Robert.Neely@noaa.gov, To

awhittker@parametrix.com, Charlie  
Wisdom <cwisdom@parametrix.com>,  
Peter Battuello  
<pbattuello@parametrix.com>,  
Robert Gensemer  
<rgensemer@parametrix.com>, Scott  
Elkind <SElkind@parametrix.com>  
cc

Subject  
10x versus 100x DDX PECs

Team -

I have resolved the seeming contradiction between Arkema's RAA Boundary based on the DDX PECx10 contour line versus the Parametrix grid cell presentation. Arkema and Parametrix used the same PEC values:

Chemical	MacDonald	other SQV	PEC or	(ug/kg)
DDE, -DDT	31.3	62.9	28	572
and 4,4'-DDE	31.3	62.9	28	572
and 4,4'-DDT	31.3	62.9	28	572

The difference is the result of presenting estimated concentrations using contour lines for PECx10 concentrations versus assigning the value of PECx10 to a 50'x50' grid cell. The Arkema contouring technique assigned a bigger area to the value of PECx10, resulting a seemingly larger RAA Boundary than one drawn strictly around each filled grid cell.

3) Once Margaret has completed revising the grid cell figures for Chapter 6, her next task is developing isopleth figures for the 14 COI that had a maximum exceedance of 1000x their smallest SLV. This figure will essentially be the same as the PECx10 figure generated by Arkema (always considering that different contouring programs produce different contours from the same dataset).

Please let me know if you have any questions, comments, or concerns.

Charlie Wisdom  
Phone: 425-458-6233 direct  
Fax: 425-458-6363  
Cell: 425-256-1272  
cwisdom@parametrix.com

PARAMETRIX  
Inspired people - Inspired solutions - Making a difference